



TITLE: AN INTEGRATED BACK-END INTEGRATED CIRCUIT MANUFACTURING ASSEMBLY
 INVENTOR(S): Bo Soon Chang
 USSN: 10/085,757 ATTORNEY DOCKET #: CYPR-PM01008

1/15

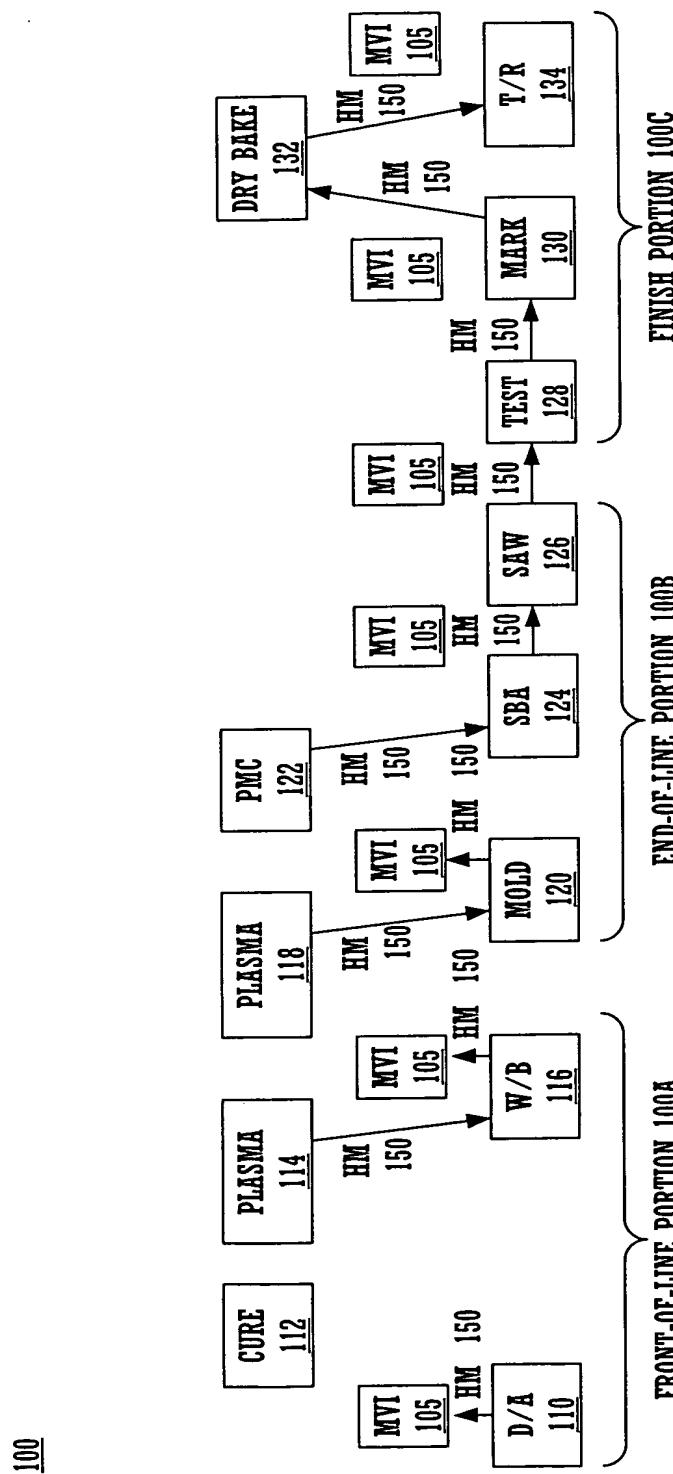


FIGURE 1
 (Conventional Art)

2/15

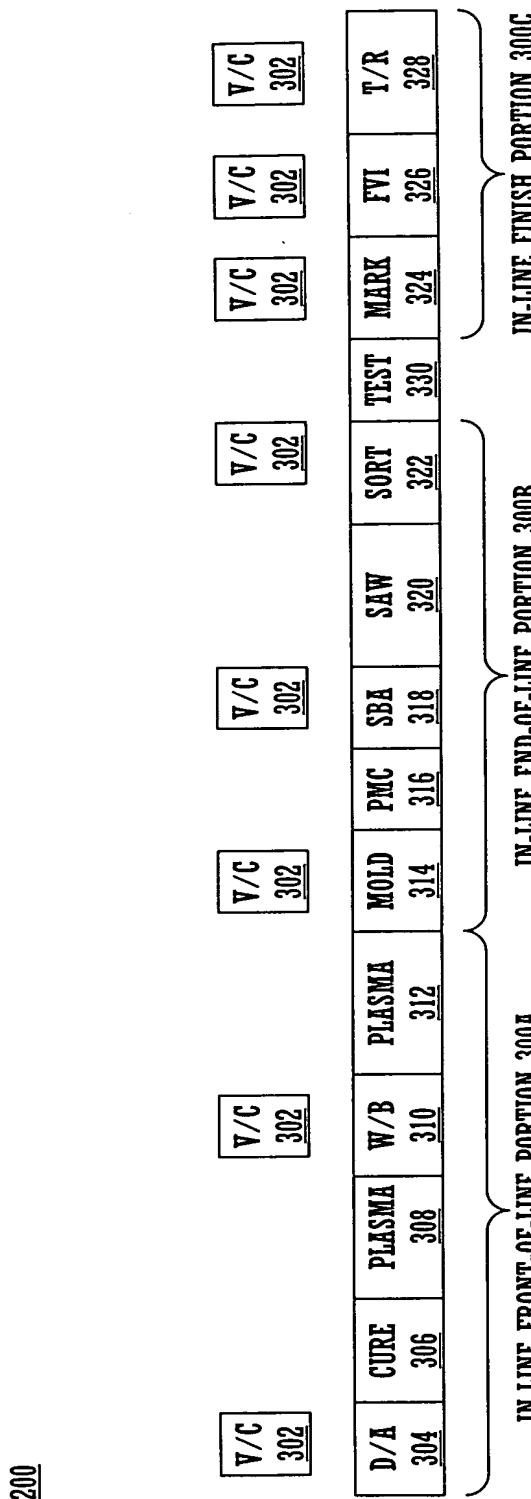
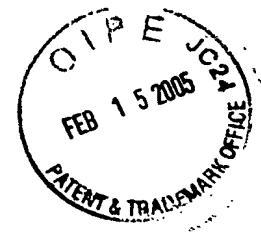


FIGURE 2



TITLE: AN INTEGRATED BACK-END INTEGRATED CIRCUIT MANUFACTURING ASSEMBLY
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3/15

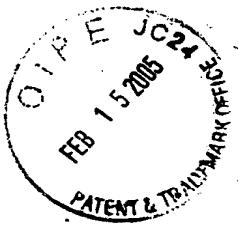
IN-LINE FRONT-OF-LINE PORTION
300A

V/C
302

V/C
302

D/A	CURE	PLASMA	W/B	PLASMA
304	306	308	<u>310</u>	<u>312</u>

FIGURE 3A



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4/15

IN-LINE END-OF-LINE PORTION
300B

V/C		SBA		SAW		SORT	
MOLD	PMC	316	318	320	322	322	322
314							

FIGURE 3B

O I P T
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5/15

IN-LINE FINISH PORTION
300C

V/C <u>302</u>	V/C <u>302</u>	T/R <u>328</u>
MARK <u>324</u>	FVI <u>326</u>	

FIGURE 3C



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6/15

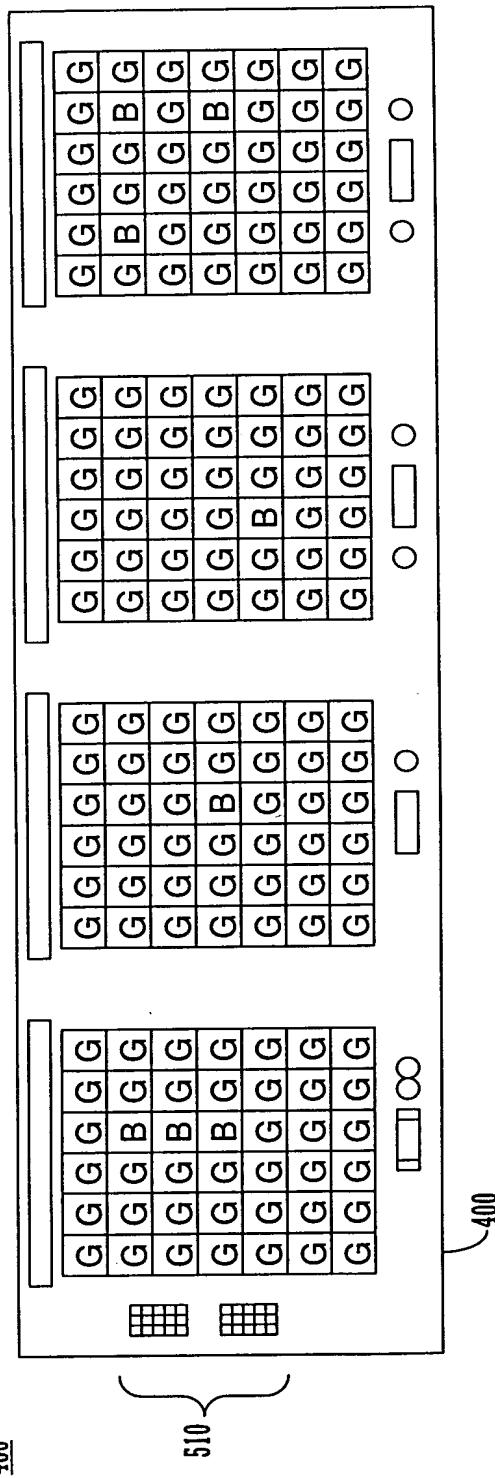


FIGURE 4



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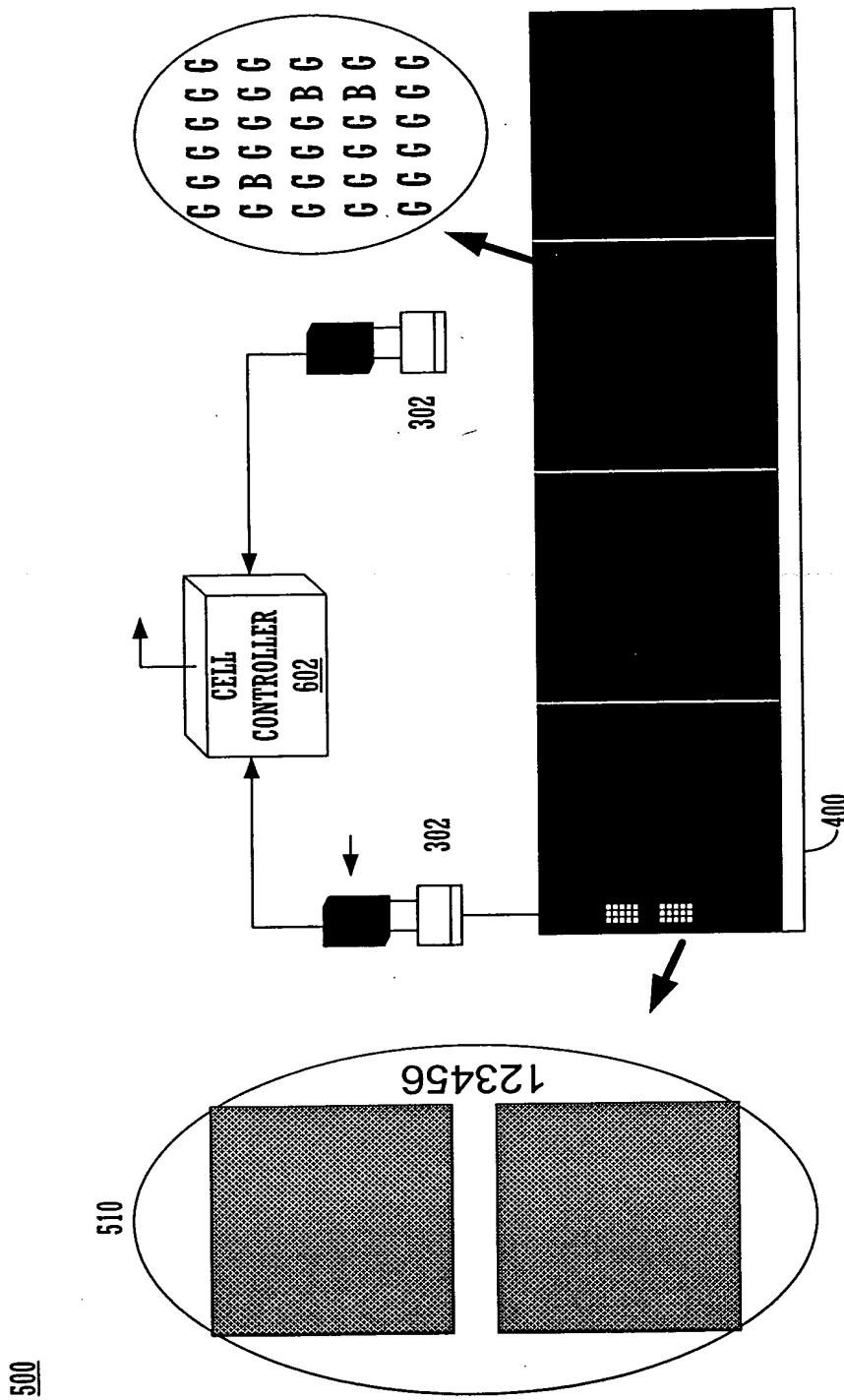
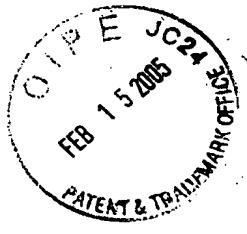


FIGURE 5



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8/15

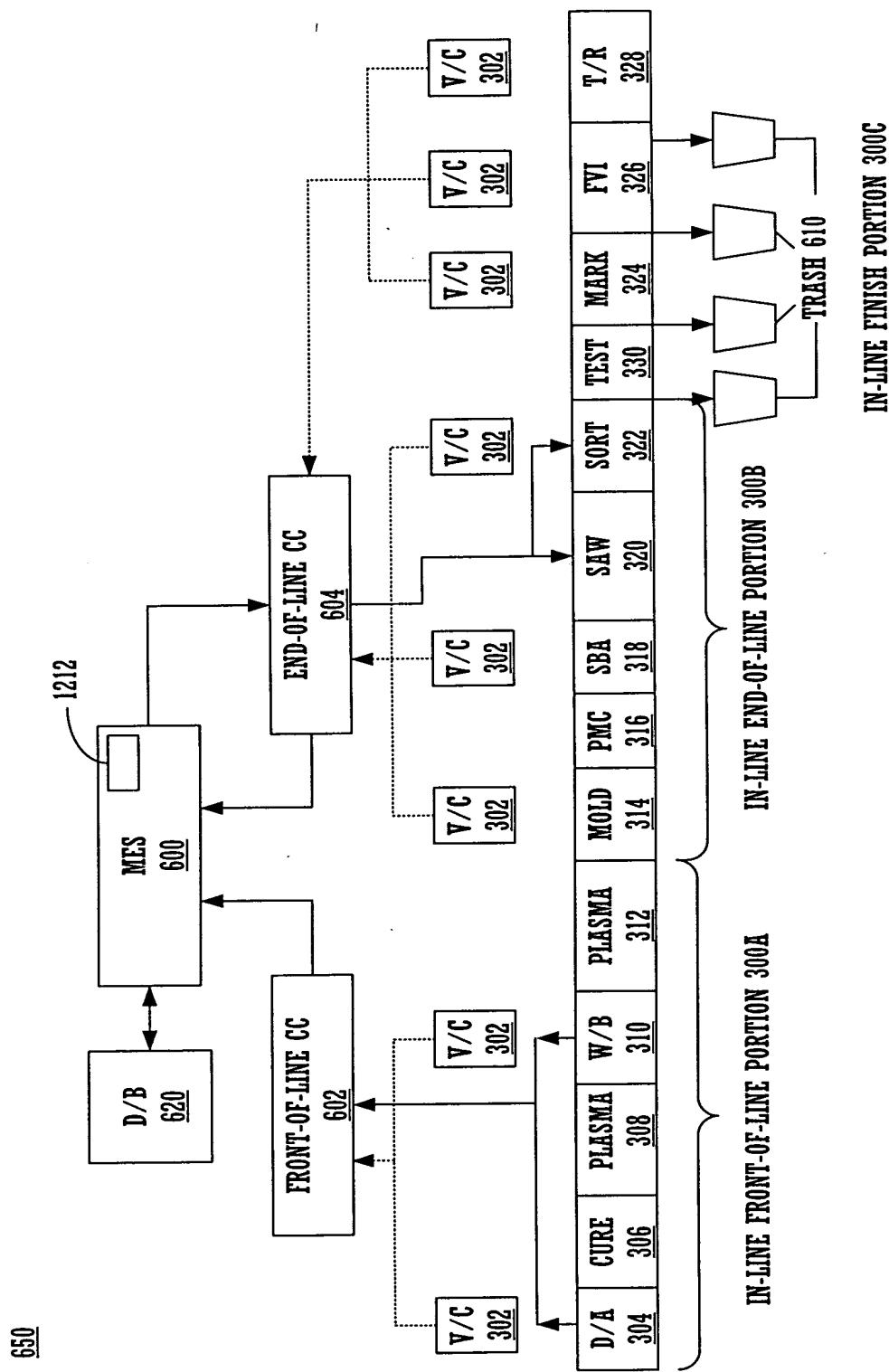
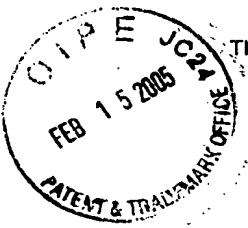


FIGURE 6



9/15

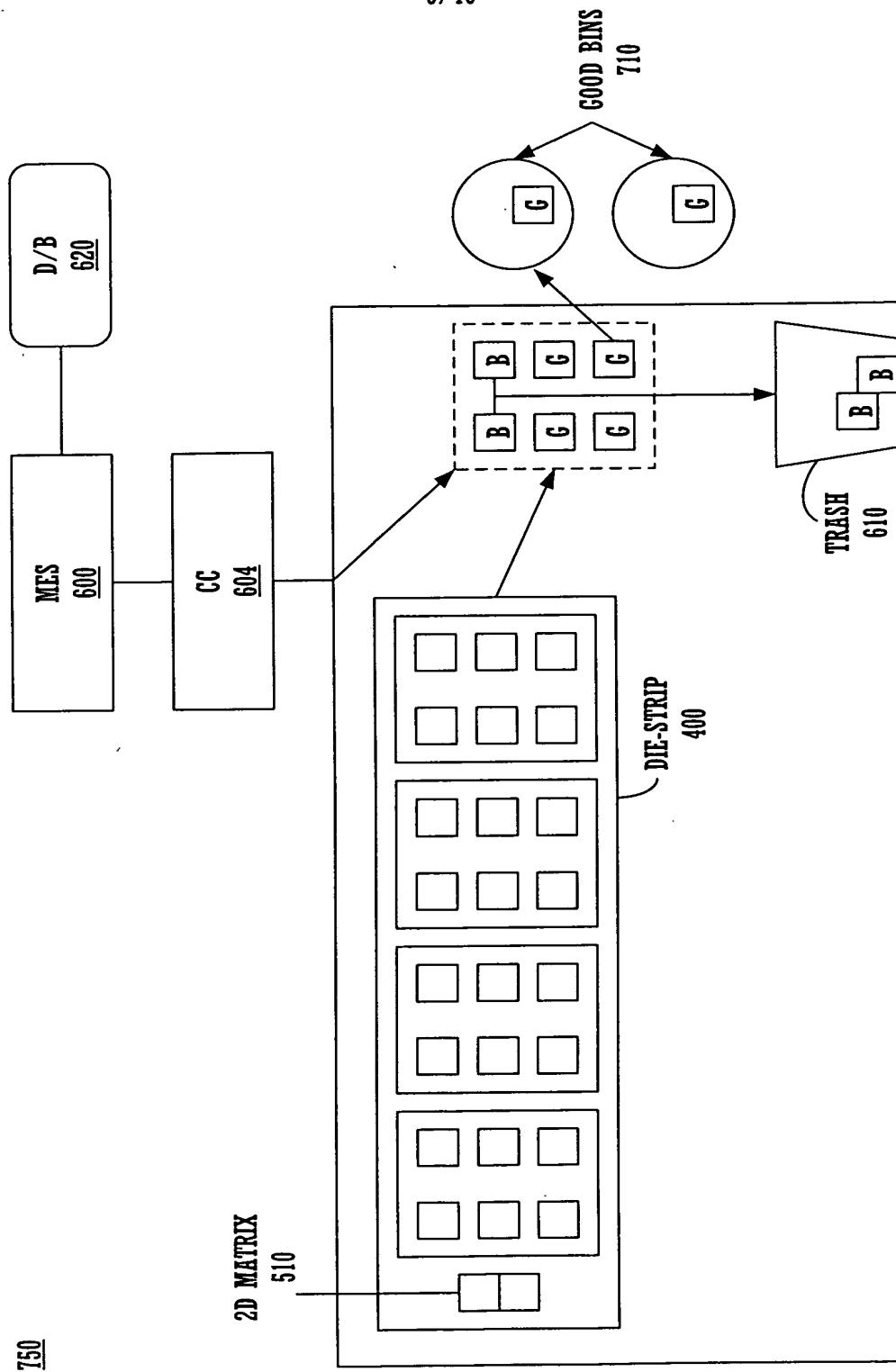
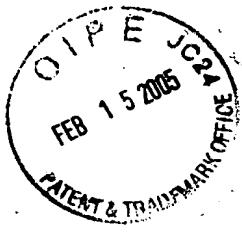


FIGURE 7



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10/15

800

START

PROCESSING A DIE-STRIP THROUGH A FRONT-OF-LINE ASSEMBLY PORTION WHICH
COMPRISSES A PLURALITY OF SUB-STATIONS OPERATING ON AN IN-LINE BASIS.

802

AUTOMATICALLY PROVIDING THE DIE-STRIP TO AN END-OF-LINE ASSEMBLY
PORTION.

804

PROCESSING THE DIE-STRIP BY THE END-OF-LINE ASSEMBLY PORTION WHICH
COMPRISSES A PLURALITY OF SUB-STATIONS OPERATING ON AN IN-LINE BASIS.

806

AUTOMATICALLY PROVIDING THE DIE-STRIP TO A TEST ASSEMBLY PORTION.

808

TESTING THE DIE-STRIP USING THE TEST ASSEMBLY PORTION.

810

AUTOMATICALLY PROVIDING THE DIE-STRIP TO A FINISH ASSEMBLY PORTION.

812

PROCESSING THE DIE-STRIP BY THE FINISH ASSEMBLY PORTION WHICH
COMPRISSES A PLURALITY OF SUB-STATIONS OPERATING ON AN IN-LINE BASIS.

814

END

FIGURE 8

11/15

900

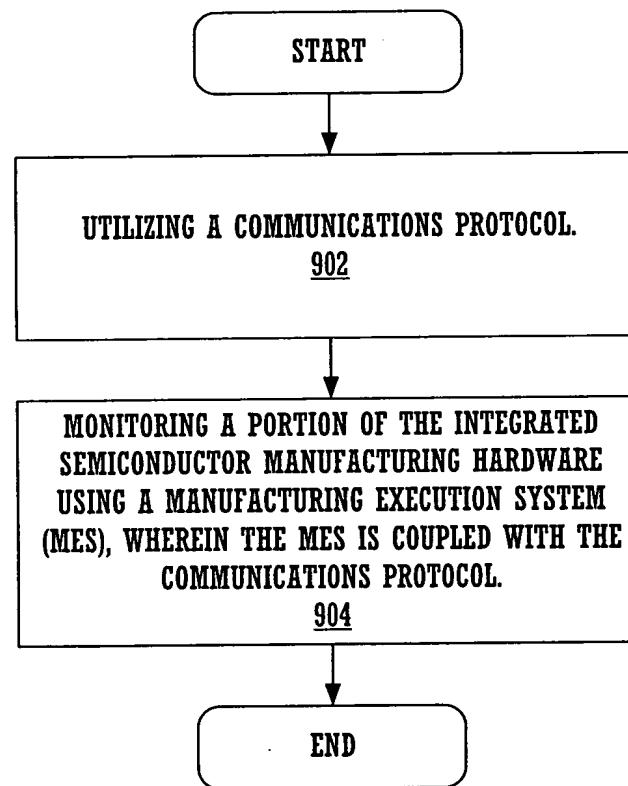


FIGURE 9



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12/15

1000

START

IMPLEMENTING A TRACKING PROCESS FOR THE DIE-STRIP WHICH
IDENTIFIES INDIVIDUAL DIE-STRIPS AND THEIR RESPECTIVE LOCATIONS
AS THEY TRAVERSE THROUGH THE IN-LINE ASSEMBLY LINE.

1002

ACCESSING AN ELECTRONIC DIE-STRIP MAP DATABASE THAT
PROVIDES PARAMETER STORAGE FOR EACH INDIVIDUAL
SEMICONDUCTOR COMPONENT WITHIN EACH DIE-STRIP.

1004

UTILIZING THE TRACKING PROCESS TO UPDATE THE ELECTRONIC DIE-
STRIP MAP DATABASE AT EACH SUBSTATION THAT COLLECTS
PARAMETER INFORMATION.

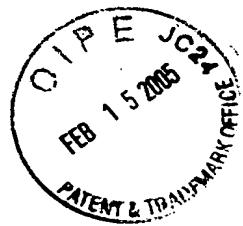
1006

CATEGORIZING THE DIE ON THE DIE-STRIP BASED ON INFORMATION
MAINTAINED BY THE ELECTRONIC DIE-STRIP MAP DATABASE AND
SPECIFICALLY REJECTING BAD DIE AND USING PARAMETER
INFORMATION TO SORT DIE.

1008

END

FIGURE 10



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13/15

1100

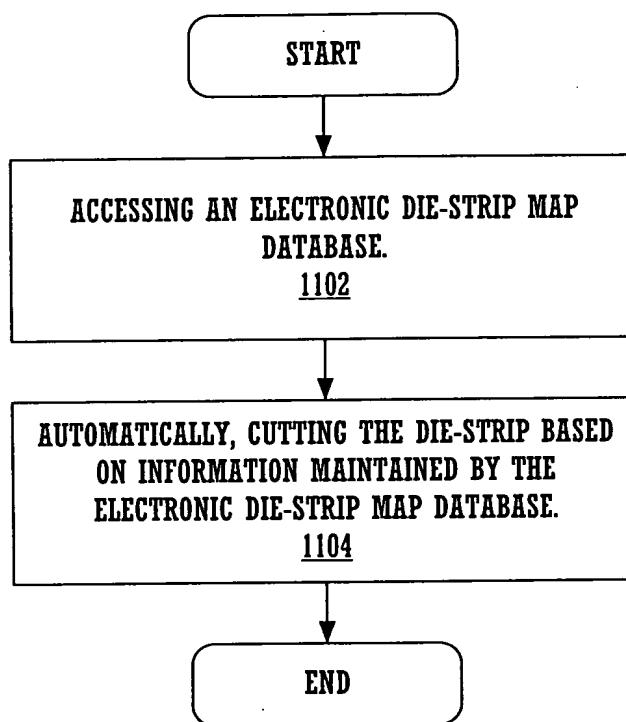


FIGURE 11



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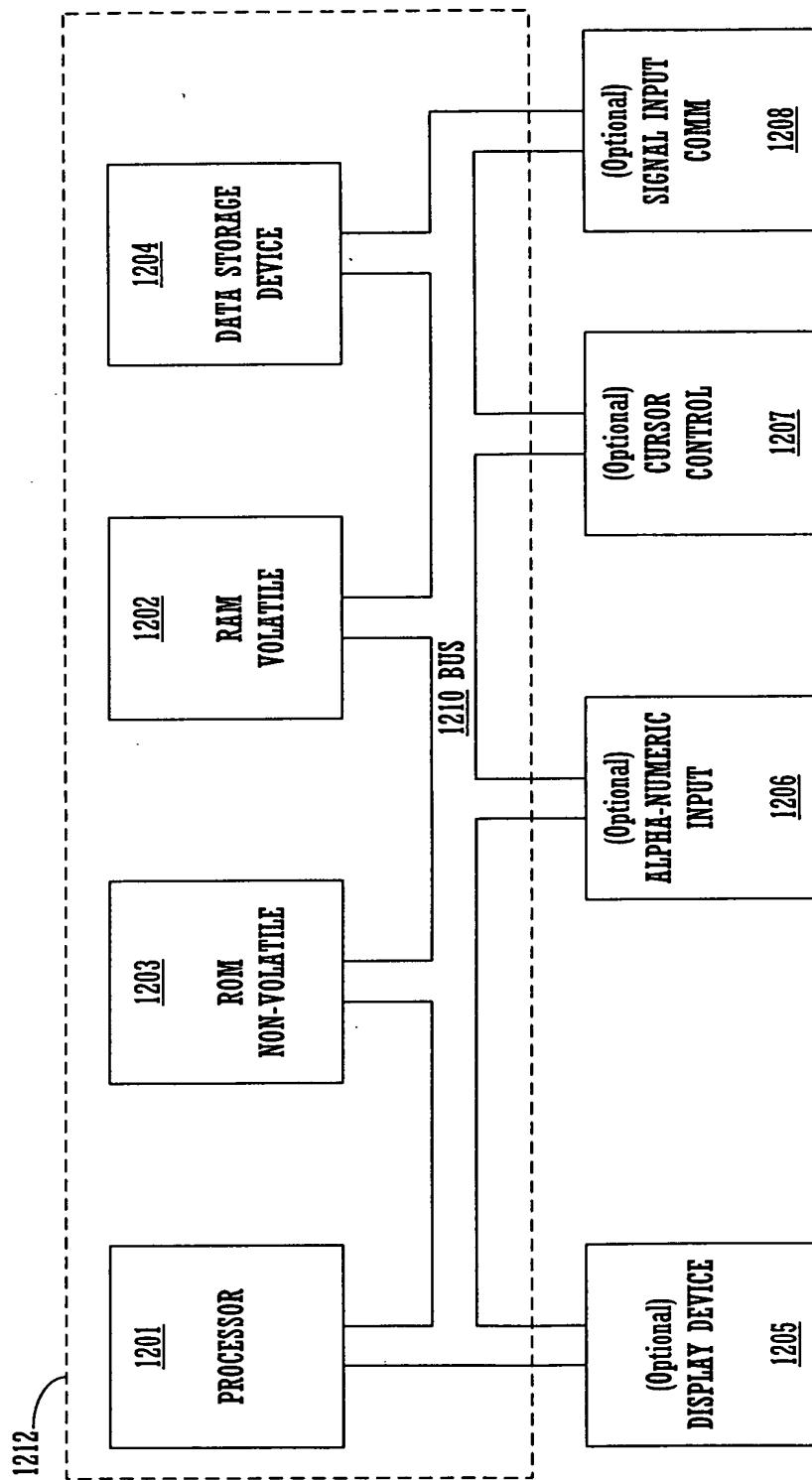


FIGURE 12

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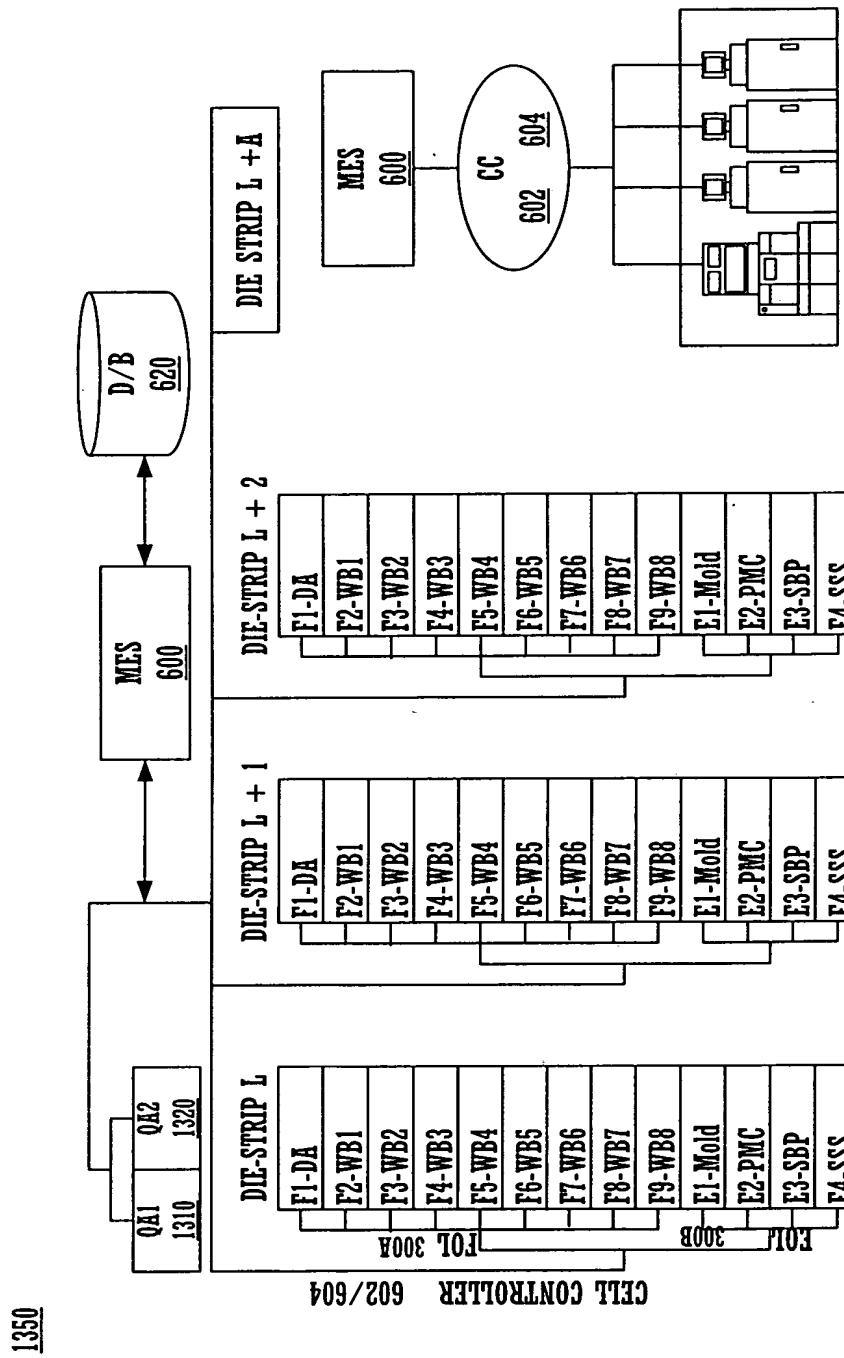


FIGURE 13